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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/555,402

11/02/2005

Norbert Struensee

23437

9441

535 7590 10/15/2009

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EXAMINER

DUONG, THO V

ART UNIT

PAPER NUMBER

3744

MAIL DATE

DELIVERY MODE

10/15/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/555,402	<b>Applicant(s)</b> STRUENSEE, NORBERT	
	<b>Examiner</b> Tho v. Duong	<b>Art Unit</b> 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2-5,7,8,10-12,15-18,20-22,24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-5,7,8,10-12,15-18,20-22,24 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/17/09</u> .   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 3744

### **DETAILED ACTION**

Applicant's amendment filed 7/5/09 is acknowledged. Claims 2-5,7-8,10-12,15-18,20-22 and 24-25 are pending.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 2-5,7-8,10-12,15-18,20-22 and 24-25 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Specification***

The disclosure is objected to because of the following informalities: on page 6 of the amended specification, applicant indicates that housing is connected to a pressure source not shown in figures 1 and 2. However, in the amended drawing a pressure source (24) is shown.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-5,7-8,10-12,15-18,20-22 and 24-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed subject matter of "pressurizing the

Art Unit: 3744

housing around the periphery of the rotor with housing air at a superatmospheric pressure” is not supported by the original disclosure.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5,8,15,16,18 ,22 and 24-25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kritzler (EP 0588185 with a corresponding US 5,577,551). Kritzler discloses (figure 4 and column 4, lines 21- column 6, line 23) a rotating heat exchanger with a rotatably mounted rotor (3), which has a first flow sector and a second flow sector for flowing of air in two directions (5,6); a housing (12) encloses the rotor at its periphery; the housing (12) surrounding the rotor and defining a first flow sector for axial front to rear flow through the rotor of air from the exterior and angularly offset from the first sector a second sector for axial rear to front flow through the rotor or air to the exterior; means (fan) for pressurizing the housing around the periphery of the rotor with housing air at a

Art Unit: 3744

superatmospheric pressure in sealing space (13); peripheral seals (9) are arranged fixed in and between of the rotor (3) and the housing (12); the pressure of the sealing air are generated by an external pressure source (fan); front and rear separators (16) arranged running diametrically at the end faces of the rotor (3) between the two flow sectors; means (fan) for projecting sealing air from the separators and thereby preventing mixing of air between the sectors (figure 4 shows sealing air projecting into the separators and out through exit 28). Regarding claims 4,5 and 15-16, the means for pressuring the housing is a fan, which is able to generate a constant air flow, which results in a constant pressure of the sealing air.

Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kritzler in view of Werke (DE 1170106B). Kritzler substantially discloses all of applicant's claimed invention as discussed above except for the limitation of a control and regulating device, which is capable of controlled or regulated according to a pressure sensor. Werke discloses (figures 1-2 and column 3, lines 4-23) a control and regulating device (9), which is capable of controlling an amount of air generated from a pressure source (7,8) pumping into a sealing band of a regenerative air heater according to a pressure sensor, for a purpose of effectively controlling the sealing of the heat exchanger. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Werke's teaching in Kritzler's device for a purpose of effectively controlling the sealing of the heat exchanger.

Claims 11-12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kritzler in view of Kraftanlagen (EP 0297230). Kritzler substantially discloses all of applicant's claimed invention as discussed above except for the limitation that a temperature regulating device and the airflow of the first sector is drawn to be used as a sealing air. Kraftanlagen

Art Unit: 3744

discloses (figure 3) a rotating heat exchanger with a rotatably mounted rotor, which has a first flow sector and a second flow sector, a temperature-regulating device (38) is provided to regulate the temperature of the sealing air, wherein the sealing air is drawn from the airflow of the first sector for a purpose of removing of ice in the regenerative heat exchanger. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Kraftanlagen's teaching in Kritzler's device for a purpose of removing of ice in the regenerative heat exchanger.

The subject matter of claims 10 and 20 are not found in the prior arts of record.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3744

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v. Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tyler J. Cheryl can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tho v Duong/  
Primary Examiner, Art Unit 3744